

FRUIT TREES

HUMBER NURSERIES 'GREEN THUMB GUIDE'



Each kind of fruit tree, even each variety (cultivar), has its own climatic adaptations and limitations. For example, the Delicious apple does best in the warmest districts of Ontario, whereas McIntosh excels in the cooler apple-growing regions. In the coldest districts with a short growing season, cultivars such as Wealthy, Yellow Transparent might be more satisfactory. Also, cultivars and rootstocks that are not economical to grow on a commercial basis may provide a lot of satisfaction to the home gardener with one or two trees. For example, a peach tree growing well out of its climatic range may bear well for a number of years in a sheltered location.



SOIL MANAGEMENT AND NUTRITION

Usually there is little choice of site or soil type in home gardens. Fruit trees will grow well in a wide range of soil types if drainage is adequate. Tile under drains improves natural drainage. Ditching and elevating the fruit tree above ground level will improve depth of rooting and water movement in heavy wet soils. Apricots, cherries, and peaches are extremely sensitive to poorly drained locations and generally perform best on well-drained sandy loam soils. Apples, pears, plums and grapes will produce satisfactorily on either sandy or clay loams.

ROOTSTOCKS

Fruit trees consist of two parts, a scion and a rootstock. The scion (or fruiting cultivar) is grafted or budded onto a chosen rootstock and forms the above ground part of the tree. The new tree is the same variety as the tree from which the scions were taken, and will produce fruit of that variety. The rootstock is chosen for its ability to support the top of the tree in various soils. A dwarfing rootstock controls size of the tree, whereas a seedling (often called standard) rootstock promotes more vigorous growth.

For ease of pruning, spraying, picking, and also for conservation of space, dwarf fruit trees are the most suitable for home gardens.

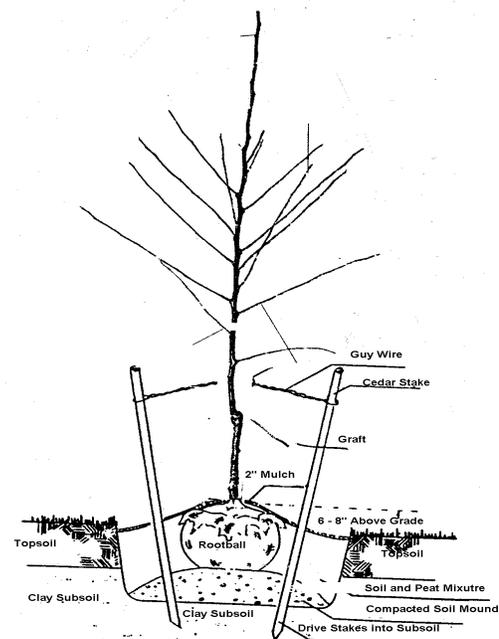
POLLINATION

With some types of fruit, a single tree may crop well when planted in the home garden. These types, which are referred to as "self-fertile", set fruit with their own pollen. Tart cherry, apricot and peach are good examples. Others, referred to as "self-sterile", either will not bear at all or will not bear consistently good crops unless pollinated with pollen from another variety. Apple, pear, plum and sweet cherry are good examples of generally "self-sterile" fruits. When any of these are grown, two or more compatible varieties should be planted fairly close to each other, (for example, in the same backyard). Trees with several different varieties of one kind of fruit grafted on one trunk are available. These trees meet pollination requirements, economize on space and can provide the owner with fresh fruit maturing over several weeks from one tree.

Cross-pollinating varieties must bloom at the same time and be compatible. Of course, pear pollen is not effective on apple; plum pollen is useless on cherry and Japanese and European cultivars are not good pollinators for each other. Tart cherry pollen can be effective for sweet cherry, although flowering times may not coincide. Most sweet cherries are self-sterile, but self-fruitful varieties such as Stella and Sweetheart, are now available. These are also good pollinators for other varieties.

PLANTING INSTRUCTIONS

All of our fruit trees are grafted and have a prominent graft union. Do not plant with the soil above the graft union! Fruit trees need excellent fast drainage. Do not plant in wet areas or over water. Use mulch to help retain soil moisture.



PLANTING INSTRUCTIONS CONT'D

Fiber Pots:

We cannot overstress the importance of leaving the pot on
These pots are made of paper and will rot away in the soil and are readily penetrated by the plant roots. Break off the pot rim down to soil level, make three cuts halfway up from the bottom and DO NOT remove the bottom of the pot. Fill in around the pot with good soil mix. Water thoroughly with a solution of plant starter fertilizer.

Plastic Pots:

Use your hand, or if necessary, a knife to cut right through the bottom of the root mass and spread the roots over a mound of soil. Plants normally spread their roots out beyond their own canopy but until your pot grown plant has done so, thorough watering right into the root zone will be very important.

Watering and After Care:

Water plants well after planting. Water approximately ONCE A WEEK THEREAFTER.

Use a high phosphorous plant starter fertilizer such as 5-15-5 weekly in the first season.

Good Soil Mix:

We recommend the following mixture:

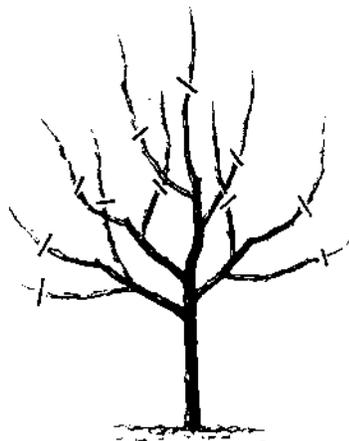
- 50% Humber 3 in 1 Mix
- 25% Peat Moss and
- 25% Composted Manure

PRUNING

Dormant Pruning

Most pruning is done when the trees are dormant, in late winter or early spring. The safest and best time is just before the buds swell and the riskiest time is very late fall and early winter. Prune no later than four weeks before frost so that new growth has a chance to harden.

All pruning has a dwarfing effect, but dormant pruning produces the most new growth. Pruning in summer has the opposite effect. It can actually retard growth by removing food-generating leaves. The harder the cutting, the greater the response in new shoot growth and this response takes place in the area of the tree where the cuts are made.



DORMANT PRUNING

Early Summer Pruning

Pruning has the greatest dwarfing effect in June and early July. If you wish to reduce vegetative growth and prevent new shoots from developing, this is the time to prune.

Midsummer Pruning

Pruning at this time of year has little or no effect on stimulating new vegetative growth. At the same time, it is not nearly so dwarfing as early-summer pruning. The root system is dwarfed somewhat but only moderately, as compared with the results of early-summer pruning. This may be the time to reduce the height and width of your trees by cutting (or breaking) back the new growth. The amount of cut-back would depend on the growth, vigour and age of the tree. A well-grown tree with a good crop could have new growth reduced by 1/2 to 2/3. This will let in more direct sunlight to set and ripen the fruit. It will also tend to improve flavor, making more sugars available to the developing fruit by stopping vegetative growth.



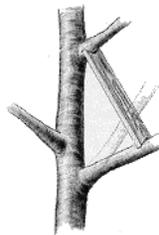
SUMMER PRUNING

Fall Pruning

In order to spread the workload over more time, some pruning might be started in early fall. Start with the oldest trees, and cease all pruning operations at least 4 weeks before frost. Peach trees should not be pruned in the fall because of the ever-present threat of canker.

Pruning Wide-Angle Branches

Limbs that meet the trunk at angles of less than 45° are more likely to split under the strain of a heavy load or high wind than those forming larger angles with the trunk. Wide-angled limbs have several other advantages. They admit more light and air into the centre of a tree, helping to set and ripen fruit, and reducing chances of disease. Branches that grow at wider angles receive more sunlight and are more productive. The accompanying diagram shows two methods of widening narrow-angle crotches.



A narrow crotch can split under the weight of a heavy crop. When the tree is young, spread upright branches to 45° or more with a wooden spacer.



If branches are long and willowy, you can widen the angles by tying them to stakes.

SPECIFIC PRUNING

Apples:

The fruit is borne on long-lived spurs on the secondary branches. Allow only one apple per spur for larger fruit. Thin out the fruit on the branch mid-way to maturity date leaving 20cm (8 inches) between fruit. Do not damage the spur when picking, as it will bear fruit again next year. Turn the apple bottom up and lift. Do not pull down or the spur may pull away.

Pears:

Very similar to apples, but need less pruning.

Cherries:

In the first year, cut leaders to promote branching. Most fruit is borne on long lived spurs, so no thinning is required and the tree can be allowed to bear heavily. In late summer remove branches that are becoming less fruitful or are growing in wrong direction.

The best time to prune is right after fruit set, when two and three year old branches and excess new growth can be removed.

Also, thin the tree if necessary by cutting older shoots back to where year old branches have developed.

Plums:

European Plums have long spurs and do not usually need thinning. Leave 10 cm between fruit. Japanese Plums have very short spurs and over-bear. Thin fruit at thumbnail size, and leave 10 to 15 cm between fruit. Cut out crossing branches and prune for horizontal growth.

Apricots:

Heavy pruning is needed to keep the Apricot producing. The best shape is low and wide-spreading with long branches, so thin and head back every year in winter. Fruit can be produced on the growth made last season, but the bulk will be on four-year-old spurs. Encourage new spurs by pinching back laterals when they are about 10 cm long. To sustain crop levels, trim out older wood. Always cut downward limbs.

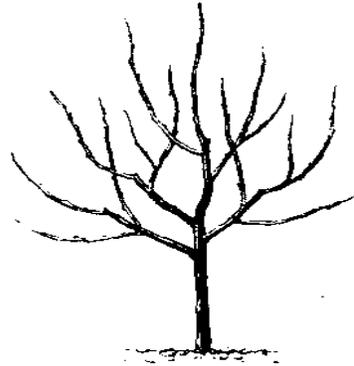
Peaches, Nectarines:

The open-centre vase shape is important in allowing sunshine to the lower interior of the tree. Always cut to outward-facing lateral branches.

Note that fruit is formed only on the branch segments that grew last summer. New wood grows on beyond the fruit and will produce next year's crop. Once harvested, the fruit section will never fruit again, so cut back two year old stems to provide new growth.

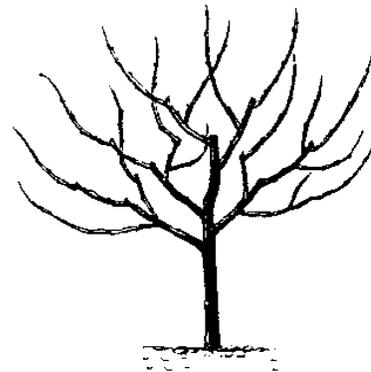
Training and Pruning a Dwarf Peach Tree

In spring when growth buds have appeared on a one-year-old tree planted in very early spring or the previous autumn, cut back the central leader to about 2 feet above the ground. Cut just above a bud. Leave the top three or four buds or side shoots below the cut to form the first branches. Remove all the side shoots lower down the stem.



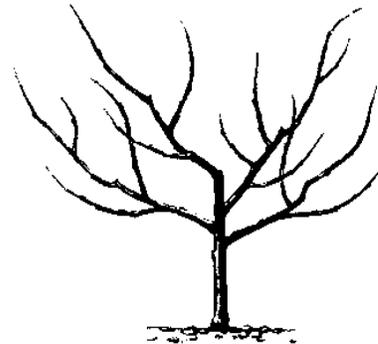
Central Leader

This is most often used for trees such as apples that naturally have a strong, upright central trunk and bear fairly heavy fruit.



Modified Central Leader

Something of a hybrid between central-leader and open-center training, this style controls the height of a tree that would otherwise form a tall central leader.



Open Center

Open-center training is used for trees such as peaches that tend to form a short trunk and a vase-shaped arch of branches.

DISEASES TO WATCH FOR:

Bacterial Canker on Peaches

Cankers are flat and may not be easily noticed, but the effect on stone fruit is serious. Attacked branches produce few leaves and soon die. Gum oozes from the cankers. Cut out diseased branches. Gum oozing from the trunk can also indicate the presence of borers. Treat accordingly, fertilize, water and mulch to keep the tree healthy.

Peach Leaf Curl

Large reddish blisters develop on the leaves. Apart from making the tree unsightly, this serious disease of peaches leads to early leaf drop and weakening of the tree. The fungus over winters in the bark and between bud scales, not on fallen leaves. Spray with Lime Sulphur in early spring and spray again with Bordeaux mixture before buds break. Spray again in autumn after leaves fall.

Black Knot on Plums

A common problem with plums, particularly prune types. Cut out these galls, cutting 4 to 6 inches below the growth. There is no effective remedy for this fungal disease, but Lime Sulphur winter spray plus mid-summer and fall application of Bordeaux mixture may help and also guard against bacterial cankers. Clean pruners after each cut with a bleach/water mix to prevent spreading the fungus.



Plum Problems

Plum curculio, leaf-curl, plum aphids, scale insects and maggots are all possible. A thorough cleansing spray of Dormant Oil in combination with Lime Sulphur needs to be applied in early spring.

GREEN THUMB GUIDE TO FRUIT TREE SPRAYS

Always read label instructions. Measure carefully, use the correct amount of product in the right amount of water. Always wear protective clothing with no exposed skin and wear goggles, gloves and facemask or respirator.

FIRST SPRAY – MARCH (If you are able to only spray once, this is the most important application)



Use a combination of Dormant Oil and Lime Sulphur BEFORE the buds start to grow in spring. This can be done in January or February, weather permitting. Do not spray during freezing weather.

Apply in a mild morning so mixture will dry before evening. DO NOT use Lime Sulphur on apricot. Check labels for other exceptions.

SECOND SPRAY – APRIL



At bud burst up to half inch green, you may use insecticidal soap and/or a fungicide if problems are evident.

THIRD SPRAY – MAY



Apply insecticides or fungicides BEFORE blossoms open and AFTER they fall off. DO NOT spray insecticides when blossoms are open. You may use fungicides at this time, which can be effective against blossom blight.

SUMMER SPRAYS



When petals fall, spray with insecticidal soap or fungicides and repeat every 10 days until near harvesting time or as required. Spray regularly for edible crops.

REMEMBER THAT SPRAY MAY STAIN BRICKS, HOUSE SIDING, FENCING, LAUNDRY AND LAWN FURNITURE.

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